Hero-550 User Manual

IDF 1.01

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Thanks for purchasing Hero-550.Please regularly visit Hero-550 web page at www.ide-fly.com which is updated regularly. product information,technical updates and manual corrections will be available on this web page. Due to unforeseen changes or product upgrades, the information contained in the manual is subject to change without notice.

Read this disclaimer carefully before using this product. By using this product ,you here by agree to this disclaimer and signify that you have ready them fully.please strictly follow the manual to assemble and use the product. The manufacturer and seller assume

no liability for any resulting damage or injury arising from the operation or use of this product.

Profile

Hero-550 is a new professional multi-rotor designed for aerial photograph .It has the features of strong stability , heavy lift, long-endurance ,frame foldable, can fly in rain and dust.

Flight Cautions

1、Keep flying the multi-rotor a distance from people,building,high-voltage lines,tall trees,water,etc.

2、Do not get close to or touch the working motors and propellers, which will cause serious injury.

3 、Do not over load the multi-rotor

4、Make sure the propellers and the motors are installed correctly and firmly before flying.

5、Make sure all parts of product are in good condition before each flight. Do not fly with wore or broken parts.

Contents

	Product name	QTY	picture
1	Center Frame	1set	
2	arms	4PCS 2red、2white）	
3	Land Gear Support Tube Base Pipe Distribution board	2sets 2sets 2sets	
4	Carbon propellers	2sets	

5	Screws kits	M3*6 8PCS M3*5 12PCS M3*8 8PCS USB 1PCS Pad for propellers 4PCS Hex nuts 4PCS Signal wire 1PCS Top thread 8PCS	
6	transmitter	1PCS	
7	10000mah 4Sbattery	1PCS	

Out of the box

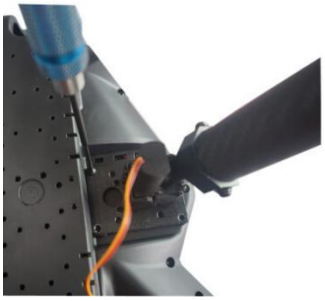
Assembly

1.1、Mount Landing Gear.

1、Connect Land Gear Support Tube and Base Pipe with connecting rod. Fix screws.

2、 connect Land Gear Support Tube and Distribution board, Fix screws.

3、Fix landing gear into centre frame



1.2、Assembly propellers

1、Make sure the propellers are without crack, the motors are mounted firmly, and rotate freely.

2、 Distinguish the marks on the arms and propellers. make sure to match the

propellers with the corresponding motors.

1.3、Assembly Arms

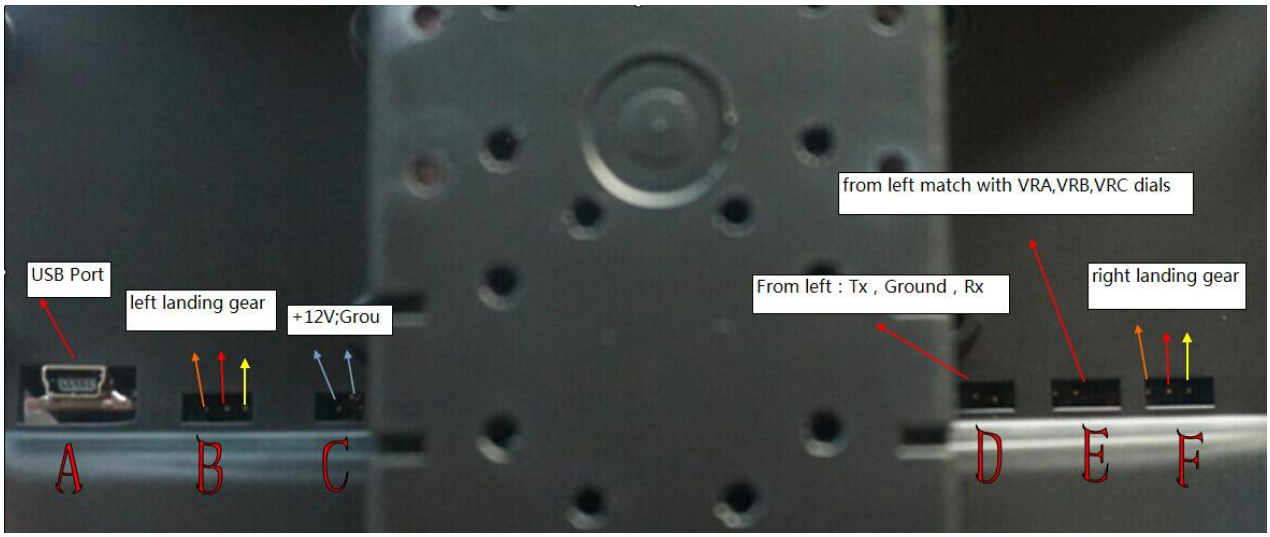
1、red arms are aircraft nose ， Black arms are aircraft tail .

2、 Please align male Banana Plug with male plug first. We recommend you hold diagonal position to make sure the aircraft does not move.

Then press down the arms to centre frame.

3、 Fix screws until touch the accessories

1.4、 Connecting with other products



A USB port

B for left landing gear

From Left:

Ground——Brown； Power——Red；Signal Yellow

C 12V (3A) power module port, For gimbal or wireless video transmission module

From Left: +12V , Ground

D Wifi module or OSD,

From left: Tx, Ground, Rx

E （50HZ， 1mS~2ms PWM Signal）

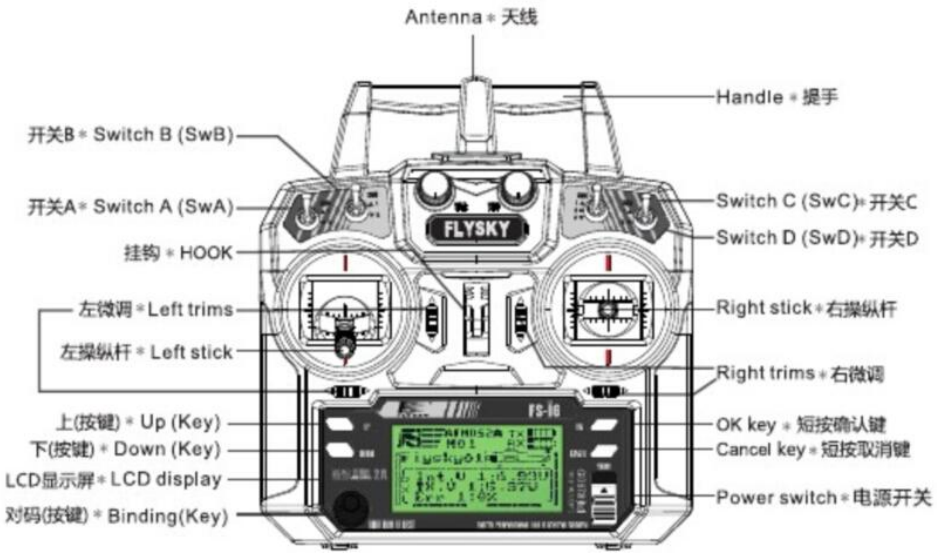
From left： match with VRA,VRB,SWC dials ，for controlling the pitch, roll, yaw of the gimbal.

F for right landing gear ，

From left ：

Ground——Brown ； Power——Red；Signal——Yellow

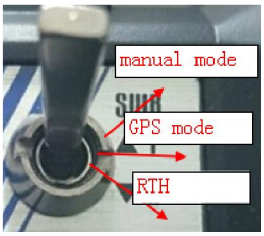
Remote controller



2.1 Power on the Remote control

1 Remove the battery holder, then install 8 new ‘AA’ batteries into the battery holder, double-checking to make sure that the polarity is correct. Reinstall the battery holder and the battery cover.

2 Set SWA and SWB switches to the upper position ,Pull throttle control stick all the way back.Turn the transmitter.

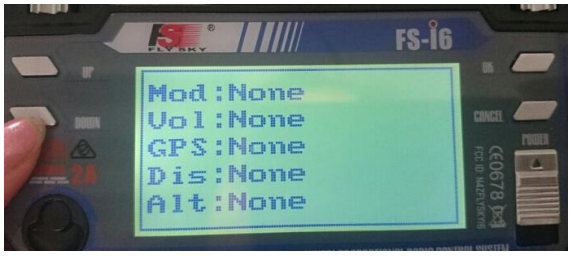


SWA switch： lowing and retracting

SWB switch： manual mode，GPS Mode，RTH

2.2 Main Screen

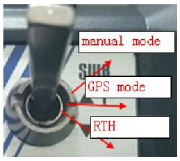
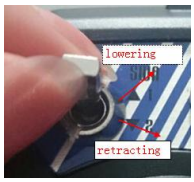
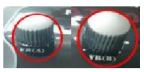
Use “down”key to receive current data .



2.3 Remote control operation

Remote Control	Aircraft	Operation details（mode2）

		The throttle stick controls aircraft altitude/ elevation. Push the stick up and the aircraft will rise. Pull the stick down and the aircraft will decend . The aircraft will automatically hover and hold its altitude if the stickers are centered.Push the throttle stick above the centered(mid-point) position to make the aircraft take off.When flying . we suggest that you push the throttle stick slowly to prevent the aircraft from sudden and unexpected elevation.
		The yaw stick controls the aircraft rudder. Push the stick left and the aircraft will rotate counter clock-wise. If the stick is centered, the aircraft will remain facing the same direction. The yaw stick controls the rotating angular velocity of the aircraft.Pushing the stick further away from center results in a faster aircraft rotation velocity.
		The pitch stick controls the aircraft′s front&back tilt.Push the stick up and the aircraft will tilt and fly forward.Pull the stick down and the aircraft will tilt and fly backward. The aircraft will keep level and straight if the stick is centered. Pushing or pulling the stick further away from center will result in a larger tilt angle and faster flight velocity

		The roll stick controls the aircraft’ s left &right tilt.Push the stick left and the aircraft will tilt and fly left.Push the stick right and the aircraft will tilt and fly right. The aircraft will keep level and straight if the stick is centered.Pushing or pulling the stick further away from center will result in a larger tilt angle and faster flight velocity
		SWB is for compass calibration and mode switch Toggle the E switch from position 1 to position 3 and back to position 1 at least 3 times,which will force the aircraft to entre into compass calibration mode. Position 1， manual mode Position2 , GPS mode Position 3 RTH
		SWA is for control the landing gear Position 1 ， lowering Position 2， retracting
		VRA,VRB dials control the pitch， roll of the gimbal.
		SWC is for the yaw of the gimbal.

Intelligent Battery

The intelligent battery is specially designed for the Hero-550. With battery capacity 10000MAH. Voltage 14.8V.

3.1 Installing The lipo Battery

Install the lipo battery into the quadcopter,making sure to push the lipo battery as far forward as possible into the body,

LED Condition Indicator

STATUS	LED CONDITION
No GPS Signal (Manual Mode)	
No GPS Signal (GPS Mode)	
6 or More GPS Satellites (Manual Mode)	
Manual Set Altitude	
GPS Set Altitude	
GPS Set Altitude (Head-Lock)	
Return to Home	
Low LiPo Battery Voltage Caution	
Low LiPo Battery Voltage Warning	

Calibrating the compass

5.1 ①Place the quadcopter right-side up on a flat,level surface,then plug the lipo

battery;

②Do not move the quadcopter for 10 seconds after plugging the lipo battery in to allow the flight controller to initialize;

5.2 ①When calibrating the compass,do not do so in an area that may cause magnetic interference,such as a parking garage,near an area with steel reinforcement,near metal fencing,rtc.

② Remove keys,cell phones and any other metal objects from your pockets that could interfere with the calibration process

1 Horizontal Calibration

Keep the quadcopter level,Cycle the Flight Mode switch SWB from the manual Mode position to the Return to Home position and back to the manual mode position three times quickly in a row. The LED Condition Indicator on the bottom of the quadcopter will turn solid Green.

Carefully rotate the quadcopter clockwise along its horizontal axis for three complete 360 ° rotations, while watching the LED Condition indicator throughout the entire process.Lift the quadcopter only enough to rotate it and make sure to keep the quadcopter level throughout the entire process.

If the quadcopter does not stay level while you ‘re rotating it. The LED condition

Indicator will go out.If this occurs,stop and level the quadcopter until the LED turns solid Green Again. Then continue rotating it until you finish three complete 360 ° rotations.

2 Vertical Calibration

Cycle the Flight Mode switch SWB from the manual Mode position to the Return to Home position and back to the manual mode position three times quickly in a row. The LED Condition Indicator on the bottom of the quadcopter will turn solid green.

Grasp the vertical rudder on the back of the quadcopter and lift the tail of the quadcopter up so that the quadcopter is in a vertical postion with the bottom of the quadcopter facing toward you.Next,carefully rotate the quadcopter clockwise along its vertical axis for three complete 360 ° rotations , while watching the LED condition Indicator throughout the entire process.Make sure to keep the quadcopter vertical throughout the entire process.

If the quadcopter does not stay level while you ‘re rotating it. The LEDcondition Indicator will go out.If this occurs,stop and jiggle the quadcopter in the vertical position until the LED turns solid Green Again. Then continue rotating it until you finish three

complete 360 ° rotations.

3 Saving calibration settings

Keep the quadcopter vertical ， Cycle the Flight Mode switch SWB from the manual Mode position to the Return to Home position and back to the manual mode position three times quickly in a row. Then keep the quadcopter level.

Wait for the calibration settings to be saved. The LED Condition Indicator will continue to illuminate solid Green. When the calibration settings are saved.the LED indictor will go out. Then flash Red and Green （NO GPS） or flash green （GPS lock）,indicating the quadcopter is ready for flight.

Takeoff/ Landing procedures

1 、Before you flight, make sure LED indicator blink green 3 times

(Keep SWB switch at GPS hover position)

2 、During the flight, Never pull the throttle stick to the lowest position

6.1 start the motor /take off ：

1) Pull the left control stick and the right control stick to the lower left and lower right corners as shown in the photo, then release the control sticks. The motors are now armed.

2) Within 5 seconds, push the throttle control stick forward to turn the motors ON. .

If you don′ t push the throttle control stick forward within 5 seconds, or if you′ re flying and pull the throttle control stick all the way back to turn the motors OFF after landing, you will need to re-arm the motors again

6.2 land

Pull the throttle stick down,,the aircraft will desend,then land.

Pull the throttle stick to the bottom, switch SWB to manual mode , motors will stop.

1 、 distance over home point ＞ 20M:

Height ≤20M， Elevate to 20M,Then fly back to home point

Height＞20M, fly back to home directly.

2 、 distance over home point ＜ 20M, fly back to home

Specifications

Frame	
Diagonal Wheelbase	550 mm
Material	Strong plastic
ESC	40 A High Speed Mute ESC
Motor	4008， 600KV
Propellers	1455 carbon propellers
KIT weight	2500g(with 10000mAh 4S battery
Max payload	3.1KG
Hover time	25mins
features： high strength， Light-weight， cool look， portable， dustproof， rain-proof,Frame foldable	